

NOTES AND MEMORANDA

The French Differential Birth Rate

SOME figures from the *Bulletin de la Statistique Générale de la France** give a résumé of the first fruits of the analysis of the 1926 Census in France, no figures more recent than 1911 having been available up to date. In the re-assessments of 1921 and 1926 a query as to the ages as well as numbers of children was introduced, but lack of means at the disposal of the Registrar-General made an analysis of the 1921 figures impossible. Parliament voted the necessary money in the case of the 1926 Census, and the complete results will be available towards the end of this year. In the meantime, figures have been worked out for eleven departments, and the various tables are here set forth.

The number of children being born is obviously insufficient to maintain a nation, and has decreased from 220 per 100 families in 1901, to 214 in 1911, and 204 in 1926.

The most interesting part of the analysis to the eugenicist is the proportion of children being born to the various social classes, and in this respect France is in a more favourable position than England, as the following table will show :

Net Fertility per 100 married men with chil- dren under	Heads of busi- nesses, etc.	Employers	Workmen	Unem- ployed	Workers on their own
13	70	76	85	65	37
16	89	91	97	77	47
18	103	100	109	89	54
21	126	112	132	111	68

A table giving the proportional distribution of children of all ages according to the occupation of the fathers yields also rather surprising results.

The largest proportion of families having two, three, and four children is found in the employer class; the unemployed head the list for families of five children, but the employers are slightly in excess of the unemployed with families of from six to eight

children. The class called "employés," which presumably includes clerks and petty officials, has far the largest proportion of one-child families, and holds its own for families of two, but drops very rapidly after that.

Judging by the results from these eleven departments, the number of families having at least three children under thirteen years of age in the whole of France has decreased by 10 per cent.

The tables given in this résumé would repay a detailed study, and only a few points have been touched in this brief note.

E. I. C.

Eugenics at Cambridge

The Cambridge Eugenics Society, which had originally been formed in 1912, but had dissolved at the outbreak of the War, has been re-started.

In addressing the new Society at its inaugural meeting on February 24th, Major Leonard Darwin gave a brief account of the old Society, and particularly mentioned the valuable work done for eugenic research by such Cambridge men as Dr. R. A. Fisher and Dr. D. Ward Cutler.

He also introduced Professor S. J. Holmes (of the University of California), who gave an address on "The Eugenic Predicament." After enumerating some of the more important inherited characters and proclivities in man, he discussed the subject of natural selection, and dwelt on the present tendency of those with good hereditary endowments to produce fewer children than the less intelligent or less desirable strata of society.

The formation of the new Society was primarily inspired by an address on "Eugenics," which was given to the Cambridge Marshall Society by Dr. K. B. Aikman. He also assisted greatly in the organization of the Society. The following officers have been elected, and a committee of six has been appointed to assist them :

* *Statistique des familles en France en 1926*, by Henri Bunle, in the Oct.-Dec. number.

PRESIDENT: Mr. N. H. Way, Clare College;
 SECRETARY: Mr. H. Khuner, Downing College;
 TREASURER: Mr. J. M. Ahern, Pembroke College.

All of the officers and committee are undergraduates; but considerable support has already been received from several prominent representatives of the University and town of Cambridge, and it is hoped that some will consent to act as vice-Presidents.
 H. KHUNER.

Eugenics and Insurance

A committee formed by the Leicestershire Health Insurance Committee is considering the formation of a eugenics service in its area. Two concrete proposals before it are the provision of a library on eugenics and human heredity, and the provision of a bureau or clinic where expert information will be available.

We understand that this welcome activity is the direct result of the conference on Racial Decay which was called by the Insurance Committee last November. Among those who spoke at the conference were Dr. C. J. Bond and Mrs. C. B. S. Hodson, whose lucid expositions of their subject are contained in the Report (obtainable from the Committee at 144 London Road, Leicester). Dr. Bond dealt with the evidences of racial decay in this country, and Mrs. Hodson with sterilization in California. Their two contributions have also been reprinted in a short pamphlet by this Society.

It is encouraging to find that insurance agencies in this country are at last beginning to take an interest in eugenics; and the only surprising thing is that they have not done so before. Not only has the biggest concern of its kind in the world, the Metropolitan Life Assurance Company of New York, taken an active and approving interest for a long time in eugenics; but also English companies have for a still longer period been accustomed to adjust

their premiums according to the biological pedigrees of the insured. Among the commoner insurances of this type granted by Lloyds, we understand, is that against twins! The premium is calculated according to the incidence of twins in the family.
 E. M.

The Danish Sterilization Law

The following is a rough translation of the essential clauses (German text, as given by Professor Dr. Fetscher in the *Archiv für Rassen und Gesellschaftsbiologie*, November 1929) of the recent Danish Act regulating sterilization:

§1. Persons who by the excessive strength or by the direction of their sex impulse are compelled to commit crimes, and who thereby are a source of danger to themselves and to the public, may be—after being first medically instructed concerning the consequences of the operation—on their own petition, subjected to an operation on the sex organs, provided that permission therefor has been granted by the Minister of Justice, after receiving a declaration from the Medical Council of the Court* and from the Ministry of Health.*

Such a petition can only be made by persons who have attained their majority. It must be accompanied by a medical affidavit and the completest possible statement of the decisive reasons actuating the petitioner. If the petitioner is under guardianship, the petition may be made on his behalf by the guardian.

If the petitioner is married the consent of the spouse must as a rule be obtained.

§2. Further, on receiving a declaration from the Medical Council of the Court and the Ministry of Health, the Minister of Justice is empowered to permit an operation on the sex organs of abnormal persons who are under the care of a State Institution, or of any Institution recognized under paragraph 61 of the Poor Law Act* of April 9th, 1891, —even though they do not constitute so great a public danger as those under paragraph 1—if it is considered as important for the public weal and advantageous for them—

selves that they should be rendered incapable of producing offspring.

An application in this sense can only be made for such persons as have attained their majority, and it must be endorsed by the Governing Body* of the institution in question and be accompanied by a declaration from the Doctor of the institution or from the Official Medical Officer*; and the application shall be made by the person himself—unless by reason of mental defect he be unable to understand the meaning of the operation.

The application must be accompanied by a declaration from a guardian appointed *ad hoc*. If the psychically abnormal person is already under guardianship, his existing guardian may be authorized to make this declaration. Before the guardian signs the declaration he must be instructed by the doctor as to the consequences of the operation.

If the applicant is married—unless the marriage has been for a long time in abeyance owing to detention in the institution or to actual separation—the spouse should, as a rule, give consent.

§3. Before the Minister of Justice grants permission for the operations treated of in this Act to take place, he must convince himself that the applicant (or the guardian) is clear about the nature of the operation and its probable consequences.

If the Minister of Justice grants permission for an operation, the exact nature of the operation, with medical-technical definition thereof, must be laid down.

In cases falling under paragraph 1 the petitioner himself chooses the operator from among doctors qualified to perform the operation; in cases falling under paragraph 2, the operator will be designated by the Governing Body of the institution.

It is the operator's duty, immediately that the operation is performed, to inform the Ministry of Justice.

If the Minister rejects the petition it cannot be renewed within a year from the date of its rejection, unless in the meantime important relevant circumstances have arisen.

§4. The costs for cases falling under para-

graphs 1 and 2 shall be borne by the persons concerned themselves. If the person has not the means to defray them, they shall fall, for paragraph 1 on the State Exchequer, and for paragraph 2 shall be met according to the general regulations of the Poor Law Act*—without in either case being accounted Poor Law Relief.*

§5. If any unauthorized person undertakes one of the operations dealt with in this Act, he shall be punished with a fine of 500-5,000 Kronen, unless under some other enactment he is liable to a severer penalty.

Omission to furnish the information laid down in paragraph 3 shall be punished with a fine of 10-200 Kronen.

§6. This Act shall come up before the Imperial Assembly,* in its ordinary session 1933-4 for revision.

E. O. L.

Temporary Sterilization

Dr. Felix Tietze, medical jurist of Vienna, contributes to the *Munich Medical Weekly* (1929, No. 50, p. 2101) a short note on the temporary sterilization case which came up before the local courts in the University town of Graz, in Austria, and which was briefly noted on p. 281 of the January REVIEW.

A certain Professor, Doctor Hermann Schmerz, surgeon and principal medical officer of a large sanatorium, had been plying a lucrative trade by sterilizing perfectly healthy men at their own request. At a preliminary inquiry Dr. Schmerz refused to make any statement whatever about the operation, pleading medical privilege. Two other doctors were called in, and gave it as their opinion that the men had been sterilized, but whether temporarily by a mere vasoligature, or permanently by vasectomy, they were unable to state.

Dr. Schmerz was given the benefit of the doubt and prosecuted for causing "slight bodily harm" (vasectomy would have constituted "severe bodily harm" and would

* Approximate rendering of the German forms.

have rendered him liable to severer penalties).

The prosecution claimed that Dr. Schmerz had sterilized at least twelve men of the Leoben neighbourhood and some five hundred to seven hundred from Upper Austria. Last summer the men, mostly railway employees with free passes, came in troops to request the operation, which Dr. Schmerz, who is a declared Social Democrat, performed for a sum of 30s. each for his fellow Socialists, while charging 200s. each to the others.

The remotest mountain villages of Upper Austria lay claim to specimens of Dr. Schmerz's skill. The men themselves can give no exact account of the operation, beyond that it took very little time, was not painful, and caused no disturbance to health, and that they were able to work as usual immediately after. They hoped the results were to be permanent.

The case ended by the accused being found guilty and fined 15,000s. (about £450). Dr. Schmerz has appealed.

The matter has unfortunately been made a political affair, the Social Democrats contending that Dr. Schmerz has been prosecuted only because he is a leading member of their party. (It does not seem to have occurred to them that the wholesale sterilization of the able-bodied of their party might be the machiavellian device of an opponent.)

Dr. Tietze justly emphasizes the extreme gravity of the case. Heartily as eugenists wish that the laws might so be modified that under due legal supervision a select committee might be allowed to authorize the sterilization of the unfit, no one could look on it as tolerable that the mere caprice of an individual surgeon should debar from fatherhood healthy, intelligent artisans and wage-earners, some of the most desirable types of citizen.

In a further letter to this REVIEW, Dr. Tietze writes: "You will find especially that the operations were not at all connected with any eugenic purpose; but that the reason for sterilizing the men was what is generally, but wrongly, called a

social reason. The intention was to enable the men to have sexual relations with their wives, or maybe with other women also, without fear of any consequences."

E. O. L.

Castration and Sexual Delinquency

In Dr. Kankleit's book (reviewed on p. 75) are given many case studies of abnormal or defective patients whose own condition, in conjunction with pronounced family histories of similar abnormalities, rendered it imperative that they should not breed. Since there is space to give but a few, only those have been chosen for which castration, not sterilization, was recommended, and in some cases performed. Not much is yet known of the effect of this operation upon human *adults*, and it has been little considered as a possible cure for abnormal or uncontrollable sexual impulses.

Oberholzer⁶ published in 1911 a detailed account of nineteen cases in which castration or sterilization was proposed and in most of which it was carried out. Nine of these were again investigated by S. Frank² after the lapse of fourteen years.

Case No. 11: 25-year old epileptic girl, nymphomania, bad heredity—father suicide, mother dementia praecox, 8 offspring, only 2 normal—twice interned for epileptic "soul-disturbances," bore 2 illegitimate children both m.d. and epileptic. Always sex-excited in presence of men. Between attacks quiet and industrious. Castration proposed, she agreed. Performed 1907. Still sexually excitable in 1908, then desire decreased and by 1910 was completely extinct. In 1914 she admitted that she felt well, was free from sex-desire and from erotic dreams. Frank reports that the attacks, which at first increased in severity and frequency after castration, later became much rarer and were no longer followed by mental disturbance.

Müller Schürch publishes two very similar cases:

(i) 18-year old imbecile,* man-mad girl. Father drunkard, mother imbecile, procurers;

* The German use of "imbezill" evidently differs from ours. In one place an "imbezill" mother is called a procurer; in another an "imbezill" girl pursues a man and compels him to marry her. This argues more intelligence than "imbecile" implies to us.

13 (out of 19) children survived, of whom 12 were mentally and morally defective. Patient sexually misused from thirteenth year, with parents' knowledge; from puberty a man-hunter. After castration she conducted herself well.

(ii) 24-year old man-mad imbecile who solicited; monthly periods of sex-excitement. Father drunkard, one aunt and one brother imbeciles. Castration carried out, complete success; 10 months after the operation the sex-impulse was extinct, disposition equable and friendly.

Two more Oberholzer cases :

(a) 32-year old male psychopath, bad heredity. As child tendency to unnatural sex satisfaction : in institution for thieving and deceit. Repeatedly punished and imprisoned for pederasty. In 1907 requested castration in writing; threatened self-castration if refused. After operation no further sexual offences; in 1909 wrote that his sex impulse was dead and he felt this to be a great happiness.

(b) 31-year old bachelor, bad heredity. At school, drunkard, thief, and swindler. At 21 ran away from drunkards' home, where he was doing a "cure"; later ran away from poor-house. Sexual assaults on girl-children. Asylum in 1901. Begged for castration and release. 1906 castration performed with parents' consent; 1907 sex-excitement reduced; April provisional release; 1910 impotence set in. No further sex offences.

Von Sury⁷ reports :

A 19-year old gardener; satyriasis, repeated attempts at rape. 5 years in asylum. Castration at request of relatives and guardian. Successful. Has worked for 3 years in freedom and only once come into conflict with police—for drunkenness.

Asper¹ reports two sex criminals whose castration avoided the necessity of lengthy internment :

(i) A thoroughly competent artisan who had always supported his family; afflicted with uncontrollably strong sex impulse; repeated rape on schoolgirls, fathered a baby by a 13-year old child. The authorities sanctioned castration and he was set at liberty.

(ii) Similar details; expressed himself as very happy and completely cured of perverse impulses.

Magnus Hirschfeld reports on a "harmless sex criminal," deeply unhappy, 49 years of age, a merchant. Subject to an accursed passion which he could not repress and which drove him to commit onanism with dirty outcasts in parks. He had been twice caught and sent to gaol. He came of pious family and was himself deeply religious but "neither prayer nor confessional, neither penance nor vow" had availed; he

pleaded that castration was "his last and only hope of rescue." In spite of earnest threats of suicide he had been repeatedly refused. At last a doctor consented, getting a written document from him, and placing on record his belief that it was the only way of restraining him from suicide. Hirschfeld inquired 3 years later. The sex impulse was dead. Patient wrote : "Dear Doctor, you can advise castration with complete confidence to those who seek release. Often when I go through the town I am so overwhelmed that tears come into my eyes : then helpless in the power of an evil spell, now so securely protected."

Kankeleit's⁵ own case which focussed his attention on this whole problem :

Sex criminal, 49, bad heredity : paternal grandfather suicide, mother alcoholic in asylum, one brother insane and died in asylum from self-mutilation. Repeated efforts at self-injury, swallowing objects, sticking nails, needles into urethra—created a record in this line; drunkard, definitely mental and moral defective. Several sex crimes on children : his first, 1907, rape of a 4-year old—exhibitionism—immoral overtures and minor indecent assaults on schoolchildren. Repeatedly punished 1910-14; asylum. When at liberty fairly industrious and self-supporting. Punishment unavailing, short sentences worthless, immediate repetition of same offence. He wrote from prison imploring castration and threatening suicide. He got another 2 years; repeated sex assaults; at last March 1929 convicted of attempted rape of 9-year old child. Again pleads for castration; legal authorities report that it is illegal—hesitation—differences of opinion—nothing done to date.

For the tendency of certain sex criminals to self-mutilation, see Kankeleit's own monograph. For the uselessness of short sentences, see case reported by Gaupp³ :

Man of 43; father drunkard, 2 brothers sex criminals; took to drink at 9, sex crime at 17; 2 rapes on grown girls, 4 assaults on children; total of 15 years penal servitude, 1 year 3 months in prison. New offence immediately on release. Finally convicted of a lust murder, having plunged a long knife into sex organs of a 4-year old child.

Dr. Gennat⁴, formerly Director of Prisons in Hamburg, emphasizes the futility of imprisonment : "The time must come when the thought of castration at last takes practical shape."

Of the nineteen castrated men and ten

castrated women reported on by Frank, eighteen were set at liberty, eight temporarily interned, and only three required to be permanently interned. Castration may therefore be considered a success.

According to statistics of Director Koch, of the Fühlsbüttel prison in Hamburg, some fifty of his sex criminals (one hundred cases) commit assaults on young children. In the same chapter* (vii—pp. 62-75) many more cases are given, for which sterilization was either tried or recommended. They include family histories of sexual abnormalities, amentia, alcoholism, insanity, deafness, and various eye defects.

E. O. L.

* Items from Kankleit's bibliography referring to his Chap. VII :

¹ ASPER : *Die strafrechtliche Sicherung der Gesellschaft vor gemeingefährlichen verbrecherischen Geisteskranken*. **Gross-Archiv**, Band 70.

² FRANK, S. : *Praktische Erfahrungen mit Kastration und Sterilisation Psychisch Defekter in der Schweiz*. **Monatschrift f. Psychiatrie und Neurologie**. Band 57, 1925.

³ GAUPP, R. : *Die Unfruchtbarmachung geistig und sittlich Kranker und Minderwertiger*. **Münchener Medizinische Wochenschrift**. 1908 S. 1103. Berlin, 1925. Springer.

⁴ GENNAT : **Blätter für Gefängniskunde**. Band 37, 1903.

⁵ KANKLEIT : *Selbstschädigungen und Selbstverwundungen der Geschlechtsorgane*. **Zeitschrift f. d. ges. Neurologie u. Psychiatrie**. Band 107, 1927—and many other articles.

⁶ OBERHOLZER, E. : *Kastration und Sterilisation von Geisteskranken in der Schweiz*. **Juristisch-psychiatrische Grenzfragen**. Band 8, 1911.

⁷ SURY, K. VON : *Die Berechtigung der sozialen Indikation zur Sterilisation und ihre forensische Bedeutung*. **Vierteljahrsschrift f. gerichtliche Medizin und öffentl. Sanitätswesen**. 3 Folge, Band 43, 1912.

particular student, in which the segregation and recombination of specific mental and temperamental traits are recorded, the purpose, of course, being to secure a pedigree picture of the near-kin which can be used for predicting the hereditary capacities and limitations of individuals in reference to particular qualities. In December 1929, Professor Barrows sent to the archives of the Eugenics Record Office 685 such records prepared under his direction by students of the Ohio State University."

The Balance of Births and Deaths

City	Year	Births (per 1,000 living)	Deaths (per 1,000 living)
Berlin	1820	32.9	25.4
	1840	31.8	28.0
	1860	35.6	22.7
	1880	39.9	29.7
	1900	26.7	19.0
	1910	21.5	14.6
	1920	16.5	14.4
London	1927	9.9	11.4
	1860	33.7	22.5
	1880	35.3	21.7
	1900	29.2	18.7
	1910	25.7	13.9
	1920	25.9	11.8
	1928	16.1	11.2
Moscow	1880	36.8	34.1
	1900	33.6	29.2
	1910	35.2	26.3
	1927	25.5	13.5
Paris	1840	32.5	30.5
	1860	32.4	26.2
	1880	25.6	25.4
	1900	21.2	19.6
	1910	17.5	16.2
	1920	19.2	14.9
Vienna	1926	16.9	16.6
	1880	40.4	28.3
	1900	31.6	20.6
	1910	22.0	16.5
	1920	15.5	18.1
	1928	10.6	13.9

Self-Pedigree Studies

In *Eugenical News* of February 1930 a brief account is given of a system of pedigree study which might recommend itself to English eugenicists attached to Universities :

" Professor W. M. Barrows continues to find that, for practical laboratory work in biology, it is profitable to direct students in preparing their own records of family traits. These are essentially pedigree records of the immediate family of the

Recent Population Statistics

Place	Year	Births (per 1,000 living)	Deaths (per 1,000 living)	Place	Year	Births (per 1,000 living)	Deaths (per 1,000 living)
				Poland	1927	31.6	17.4
				Warsaw	1927	19.3	14.4
Australia	1927	21.7	9.5	Russia	1927	43.0	20.8
Sydney	1927	19.5	9.6	Moscow	1927	25.5	13.5
Austria	1928	17.5	14.4	Leningrad	1927	24.7	16.0
Vienna	1928	10.6	13.9	Spain	1927	28.6	18.9
Czecho-Slovakia	1928	23.3	15.1	Madrid	1927	24.5	18.7
Prague	1928	12.5	12.0	Sweden	1928	16.1	12.0
Brno	1928	13.1	11.5	Stockholm	1928	10.9	11.3
Denmark	1926	20.5	11.0	Switzerland	1928	17.3	12.0
Copenhagen	1926	16.5	11.9	Zürich	1928	13.2	10.3
Egypt	1926	43.2	26.2	U.S.A.	1925	21.1	11.7
Cairo	1926	51.6	34.5	New York	1925	20.6	11.5
Alexandria	1926	49.6	30.5	Chicago	1925	19.9	11.5
England	1928	16.7	11.7	Philadelphia	1925	19.7	13.2
London	1928	16.1	11.2	Detroit	1925	25.8	11.0
Birmingham	1928	17.8	11.0	Los Angeles	1925	15.6	9.6
Liverpool	1928	22.0	13.2	Cleveland	1925	21.5	10.4
Manchester	1928	17.1	13.2	St. Louis	1925	19.4	13.9
Sheffield	1928	16.4	11.8	Baltimore	1925	21.3	14.6
Leeds	1928	16.1	12.0	Boston	1925	23.6	14.8
Bristol	1928	16.3	11.5	San Francisco	1925	12.8	10.9
France	1926	18.8	17.5	Pittsburgh	1925	24.3	14.8
Paris	1926	16.9	16.6	Buffalo	1925	23.2	13.4
Germany	1927	18.4	12.0	Milwaukee	1925	21.8	10.7
Berlin	1927	9.9	11.4	Washington	1925	18.4	14.1
Hamburg	1927	12.2	10.9	Newark	1925	23.4	11.7
Cologne	1927	16.0	10.5	Cincinnati	1925	20.4	16.0
Leipsic	1927	12.8	10.8				
Munich	1927	12.0	11.5				
Dresden	1927	11.1	10.6				
Breslau	1927	13.7	11.6				
Frankfort	1927	11.6	9.9				
Hungary	1927	25.7	17.7				
Budapest	1927	17.0	17.8				
Italy	1927	27.0	15.8				
Naples	1927	25.5	16.9				
Milan	1927	14.5	12.2				
Rome	1927	24.0	14.4				
Genoa	1927	14.6	13.3				
Turin	1927	13.2	13.8				
Palermo	1927	23.7	15.6				
Japan	1927	33.6	19.8				
Osaka	1927	26.1	18.3				
Tokyo	1927	25.6	14.5				
Netherlands	1928	23.3	9.6				
Amsterdam	1928	18.2	8.9				
Norway	1927	17.8	11.2				
Oslo	1927	9.0	11.7				

NOTE.—The births and deaths of non-residents are included in the urban rates in Austria and Japan. They are excluded in Australia, Czecho-Slovakia, England, Germany, and Poland. I do not know what is the practice in the other countries.

CHRISTOPH TIETZE.

The Genetics of Eyesight

An interesting addition to the long list of genetically determined abnormalities of the eye is contained in *The Health of the School Child** (page 18), where Dr. Wray of the Lancashire County Council medical staff gives the conclusions of his study on the etiology of defective vision :

* *The Health of the School Child*: Annual Report of the Chief Medical Officer of the Board of Education for the year 1928. London, 1929. Stationery Office. Pp. 172. Price 1s.

"(1) That heredity plays a large part in the production of errors of refraction due to mixed astigmatism, *and that the maternal influence is the more potent one in passing on the defect to the next generation.* 38.2 per cent. of the parents of children affected by mixed astigmatism showed evidence of visual defect; 49.8 per cent. of the cases affected with this defect showed visual defect amongst other members of the family. Brothers or sisters of the cases examined showed myopic errors frequently, but hypermetropic errors were also found. The familial predisposition to this defect or other defects of sight was found to be about 50 per cent.

(2) More cases of this defect are found in older children, *and more frequently in girls than in boys,* conditions which are also found in myopia.

(3) More cases are found in schools where lighting is defective.

(4) More cases are found in country schools than in urban schools.

(5) Close relationship between the parents is a potent factor in producing this defect."

(The italics are ours.)

The whole of the Report, of course, is of much interest, in particular the ascertainment of delicate children (pages 28 and 29) from 1924 to 1928. In London the figure fluctuates fairly steadily around the 13,000 to 14,000 mark, but in the country, as a whole, it rises steadily from 61,798 to 87,404. Part of this rise seems to be due to improved ascertainment, and the constancy of the London figure is attributed to the thorough ascertainment which has for long been the rule in that area. But against this must be put the enormous migration of children in and out of London; while it is difficult to believe, in the face of much other evidence, that the whole of the increase in the country at large can be due only to improved ascertainment.

E. M.

In the Light of the Stars

Broadcasting his Point of View* on February 24th, Sir James Jeans looked at mankind like a Martian astronomer through a distant telescope, and saw us as the creatures of a second in the course of evolution. Looking forward:

"Whatever our views on a future life in another world, we recapture the old Jewish concept of an immortality in this world—or something which is effectively as good as immortality—enjoyed not by us but through us, by our posterity. Our problem is no longer merely to muddle through for a few more generations. We see ourselves as the architects of a tremendous future, with science giving us the power to build for good or evil, to make or to mar. . . .

"If we are to make the earth a paradise again, it seems to me that our first duty is, at all costs, to prevent the moral, mental, and physical wreckage of to-day from reproducing itself, and starting a new sequence of unhappy lives trailing down through endless generations. To encourage this stream of misery becomes a vice; to check it a virtue. . . .

"Our unsentimental ancestors achieved this in a very simple way: they just allowed the weaker and less successful to go to the wall. Two hundred years ago three-quarters of the babies born in London died in infancy—three out of every four. Those few who survived must, on the whole, have been abnormally strong, or else born of successful parents, who were able to give them every care. Thus, it was natural for the English race to become strong and successful; the process was almost automatic.

"To-day we are heading in precisely the opposite direction. There is no weeding out of the unfit, we save nearly all our babies indiscriminately—good and bad, strong and weak, healthy and diseased."

* Appearing later in the *Listener*, March 5th, 1930.